

REMARKS

In the final Office Action dated June 26, 2008, the Examiner: rejected claims 1-3, 5, 6, 10, 18-21, 24-26, and 28 under 35 U.S.C. 102(b) as being anticipated by U. S. Patent 4,812,840 ("*Girard*"); rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over *Girard* in view of U.S. Patent 5,587,707 ("*Dickie*"); rejected claims 8 and 11-14 under 35 U.S.C. 103(a) as being unpatentable over *Girard* in view of European Patent Application No. EP0545001 ("*Morimoto*"); rejected claim 9 under 35 U.S.C. § 103(a) as being unpatentable over *Girard* in view of *Morimoto* and *Dickie*; and objected to claims 7, 15-17 and 27 as being dependent on a rejected base claim, but otherwise allowable.

In this response, claims 1, 7, 10-11, 15, 18, 24, 26-28 have been amended. Based on the amendments and arguments presented herein, Applicant respectfully requests reconsideration and allowance of the pending claims.

Allowable claims

Claims 7, 15, and 27 have been rewritten in independent form. For at least this reason, claims 7, 15-17 and 27 are allowable as indicated by the Examiner.

§ 102 Rejections

The Examiner rejected claims 1-3, 5, 6, 10, 18-21, 24-26 and 28 as being anticipated by *Girard*. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the...claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Amended claim 1 requires "a first master device generating a first data stream" and "a second master device generating a second data stream, the first and second master devices being independent". The Examiner cites *Girard's* controllers 20 and 22 as comparable to Applicant's claimed master devices. See Final Office Action dated 06/26/08, page 2, item 3. However, *Girard* controllers 20 and 22 are not master devices and do not generate data streams as do Applicant's claimed master devices. Instead, *Girard's* controllers 20 and 22 are "both controlled by a processor 24" (see col. 2, lines 54-56) and appear to function simply as relays between the processor 24 and the multi-mode switch 10. Specifically, *Girard* states "In normal operation of the system, the processor 24 will act through the primary controller 22 and the switch 10 to control and

communicate with the ATM 28" (see col. 2, lines 59-62). Thus, it is *Girard's* processor 24, rather than the controllers 20 and 22, that communicates with and controls the ATM 28. *Girard's* processor 24 is not comparable to Applicant's first and second master devices, which are independent of each other. For at least these reasons, claim 1 and its dependent claims are not anticipated by *Girard* and are allowable.

Claim 10 was amended to replace the term "data stream validity" with "data stream integrity". Claim 10, in part, requires a "first master device" and a "second master device." For much the same reasons as given previous with respect to claim 1, *Girard* does not teach Applicant's claimed first and second master devices as in claim 10. Claim 10 further requires "the first processor asserts and de-asserts the switch control signal in response to a determination of first and second data stream integrity and mastership transfer commands associated with the first and second master devices" (emphasis added). The switch modes in *Girard* do not involve "a determination of first and second data stream integrity" as in claim 10. Instead, *Girard's* switch modes are described as a manual mode (col. 3, lines 11-16), an automatic first-come first-serve mode (col. 3, lines 16-21), and an automatic priority connection mode (col. 3, lines 21-33). None of these switch modes rely on a determination of data stream integrity as in claim 10. The Examiner unreasonably argues that giving priority to either of the controllers 20 or 22 is comparable to a determination of whether a data stream is valid or invalid (see Final Office Action dated 06/26/08, page 5, second full paragraph). Giving priority does not have to involve a determination of whether a data stream is valid or invalid and in *Girard* there is no such determination. Merely to expedite prosecution of the claims, Applicant has amended claim 10 to recite "data stream integrity" rather than "data stream validity" to clarify that the quality of data content is being considered. Just as *Girard* does not teach "data stream validity", *Girard* does not teach "data stream integrity" as in claim 10. For at least these reasons, claim 10 and its dependent claims are not anticipated by *Girard* and are allowable.

Claim 18 requires "receiving a plurality of data streams" and "forwarding one of the data streams according to a prioritization of data stream validity estimates, requests to forward a particular data stream, and a switch-based timing threshold." *Girard's* Fig. 1 shows that switch 10 has two input ports A and B, but does not teach receiving a plurality of data streams as in claim 18. In other words, *Girard* does not clarify whether the processor 24 provides multiple data streams and simply indicates that the back-up controller 20 can take the place of the primary controller 22 (see col. 2, lines 65-68). Further, *Girard* does not even mention data stream validity estimates and thus does not forward data

streams based, in part, on data stream validity estimates. For at least these reasons, claim 18 and its dependent claims are not anticipated by *Girard* and are allowable.

Claim 24, in part, requires "means for controlling coupled to the means for switching mastership, wherein the means for controlling asserts and de-asserts a signal to control the means for switching mastership based on requests originating from an active master device and requests originating from an idle master device" (emphasis added). Again, *Girard's* switch modes are described as a manual mode (col. 3, lines 11-16), an automatic first-come first-serve mode (col. 3, lines 16-21), and an automatic priority connection mode (col. 3, lines 21-33). *Girard* does not teach that an active master device can request a switch as in claim 24. Instead, *Girard* either switches manually or upon request from the non-active controller.

Further, *Girard* does not teach a subsea tool responsive to commands received from the first and second master devices as in claim 24. For at least these reasons, claim 24 and its dependent claims are not anticipated by *Girard* and are allowable.

Dependent Claims

Claim 3 depends from claim 1 and is allowable for the same reasons. In addition, claim 3 requires "the first and second master devices are in different locations such that a user having access to the first master device is not able to simultaneously access the second master device and vice versa." *Girard* does not teach this limitation. The controllers 20 and 22 are not described as being remote from each other. On the contrary, *Girard's* controllers 20 and 22 are both controlled by the same processor 24 (see col. 2, lines 54-56). Thus, *Girard* at least indicates that the controllers 20 and 22 would be near each other. For at least this additional reason, claim 3 is allowable.

Claim 5 depends from claim 1 and is allowable for the same reasons. In addition, claim 5 requires that the redundancy manager is configured to selectively forward one of the first and second data streams based on "a validity estimation of the first data stream" and "a validity estimation of the second data stream." As previously discussed for claim 10, *Girard* does not teach data stream validity, which is not the same as data stream existence or data stream priority. For at least this additional reason, claim 5 is allowable.

Claim 6 depends from claims 1 and 5 and is allowable for the same reasons. In addition, claim 6 requires that mastership transfer commands are sent to the redundancy manager in response to "user intervention" and "at least one of data content received from the slave data and a lack of data received from the slave device." *Girard* mentions a manual mode that involves user intervention (see col. 3, lines 11-16), but does not combine the manual mode with data content or a lack of data from the slave

device as in claim 6. For at least this additional reason, claim 6 is allowable.

Claim 19 depends from claim 18 and is allowable for the same reasons. In addition, claim 19 requires "cycling between forwarding the data streams if a determination is made that none of the data streams are valid." *Girard* does not even discuss data stream validity and much less cycling between forwarding different data streams "if determination is made that none of the data streams are valid" as in claim 19. For at least this additional reason, claim 19 is allowable.

Claim 20 depends from claim 18 and is allowable for the same reason. In addition, claim 20 requires "detecting when a data stream becomes valid and setting a relay to forward the valid data stream." Again, *Girard* does not discuss data stream validity. Detecting when a communication is complete as in *Girard* is unrelated to detecting whether a data stream is valid or not. *Girard* appears to indicate that there would not even be a data stream when a communication is complete. A lack of a data stream is not the same as an invalid data stream. For at least this additional reason, claim 20 is allowable.

Claim 25 depends from claim 24 and is allowable for the same reason. In addition, claim 25 requires "means for switching mastership based on a validity estimation of the data streams from the first and second master devices." *Girard* does not discuss data stream validity and thus does not teach the claimed limitations. For at least this additional reason, claim 25 is allowable.

Claim 26 depends from claim 24 and is allowable for the same reason. In addition, claim 26 requires first and second master devices are configured to send requests to transfer mastership in response to "user input" and "at least one of data content received from the subsea tool and a lack of data received from the subsea tool." *Girard* mentions manual switching, but does not combine user input with data content or a lack of data from a subsea tool as in claim 26. For at least this additional reason, claim 26 is allowable.

Claim 28 depends from claim 1 and is allowable for the same reasons. In addition, claim 28 requires that "both of the first and second master devices are configured to simultaneously monitor a data stream from the subsea tool" (emphasis added). *Girard* does not teach this limitation. In *Girard*, the switch 10 connects only one controller (20 or 22) at a time to an ATM 28 (see Fig. 1 and col. 2, line 59 – col. 3, line3). For at least this additional reason, claim 28 is allowable.

§ 103 Rejections

The rejections under U.S.C. § 103 are directed to dependent claims 4, 8-9 and 11-14. The additional references (*Dickie* and *Morimoto*) do not overcome the deficiencies of *Girard* discussed previously. For at least this reason, claims 4, 8-9 and 11-14 are not obvious and thus Appellant

respectfully requests that the § 103 rejections be withdrawn and these claims set to issue.

CONCLUSION

During the course of these remarks, Applicant has at times referred to particular limitations of the claims that are not shown in the applied prior art. This shorthand approach to discussing the claims should not be construed to mean that the other claimed limitations are not part of the claimed invention. They are as required by law. Consequently, when interpreting the claims, each of the claims should be construed as a whole, and patentability determined in light of this required claim construction. Unless Applicant has specifically stated that an amendment was made to distinguish the prior art, it was the intent of the amendment to further clarify and better define the claimed invention and the amendment was not for the purpose of patentability. Further, although Applicant may have amended certain claims, Applicant has not abandoned its pursuit of obtaining the allowance of these claims as originally filed and reserves, without prejudice, the right to pursue these claims in a continuing application.

Should any fees have been inadvertently omitted, or if any additional fees are required, or if any fees have been overpaid, please appropriately charge or credit to those fees to Deposit Account No. 03-0335 of Cameron International, Houston, Texas and consider this paper a petition for any necessary extension of time.

If the Examiner has any questions or comments regarding this communication, he is invited to contact the undersigned to expedite the resolution of this application.

Respectfully submitted,

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